



2783
 DUQUESNE
 UNIVERSITY

RECEIVED

2009 NOV 13 PM 2:17

BAYER SCHOOL OF NATURAL AND ENVIRONMENTAL SCIENCES
 CENTER FOR ENVIRONMENTAL RESEARCH & EDUCATION

331 FISHER HALL
 600 FORBES AVENUE
 PITTSBURGH, PA 15282
 TEL 412.396.4233
 FAX 412.396.4091
 www.science.duq.edu/esm

RECEIVED

October 27, 2009

NOV 10 2009

Honorable John Hanger, Chair
 Environmental Quality Board
 P.O. Box 8477
 Harrisburg, PA 17105-8477

ENVIRONMENTAL QUALITY BOARD

Re: PA Bulletin 09-1610
 25 Pa Code: Chapter 102

Dear Secretary Hanger and Environmental Quality Board Members:

The Center for Environmental Research and Education (CERE) at Duquesne has long held in high regard the importance of applying academic expertise to "real world" issues. In 2002 CERE began working with a number of municipalities in Allegheny and Westmoreland Counties, both County Conservation districts, local consulting companies, 3 Rivers Wet Weather, Local Government Academy, and Turtle Creek Watershed Association, among others, to address the environmental aspects of municipal operations--seeking ways to streamline processes, reduce environmental impacts, and save tax dollars.

Stormwater management proved to be the issue of greatest concern to municipalities because of its huge impacts upon municipal operations, resident and business risks and damage, and property value stability. As a result, the focus of much of CERE's technical outreach over the last seven years has been on stormwater impacts, their origins and contributing factors, and the best reduction and mitigation options.

We now understand the substantial breadth and depth of the problems, as well as the fact that their origins and sources go well beyond usual assumptions. They go to the heart of conventional engineering practices, traditional attitudes about land use and development, the fundamental **and faulty** assumption that rainfall is a waste product, and the laws, regulations, and codes that inadvertently reinforce and institutionalize flawed practices and processes.

Cooperative steps to resolve our collective problems are required. Active engagement of Environmental Quality Board (EQB) is crucial to reducing the growing health and safety risks; flooding erosion, and sedimentation damage to public and private property; and associated costs (taxes, utility bills, and insurance premiums) for all Pennsylvanians.

When proposing changes to Chapter 102 or to any other parts of the Pennsylvania Code, we ask the EQB to consider the following concepts:

1. Rainfall is one of Pennsylvania's most valuable natural resources. Squandering it adversely affects the commonwealth as a whole – its economy, ecology, and health. All citizens have a responsibility to manage it carefully.
2. The water cycle functions to human advantage, yet conventional land use practices often sever the functions that provide *greatest benefits at lowest costs*. Therefore, water cycle principles should be incorporated into stormwater management regulations, planning, engineering, permitting, and post-construction measures.
3. Natural infrastructure (a term that includes native vegetation, undisturbed soils, slopes, wetlands, streams and rivers, riparian areas, and flood plains) has the ability to reduce erosion, safely manage large volumes of rainfall, capture and decompose pollutants, and reduce flood potential for miles downstream. Preserving and maintaining this infrastructure through creative land use and development practices is one of the most effective means of watershed management and drinking water source protection.
4. When natural infrastructure cannot be preserved, replacing it with man-made substitutes should be acceptable only if those substitutes start with deep soils, include ample vegetative cover, and have a long-term maintenance plan with the banked resources to enact it.
5. Clearly stated regulatory goals and limits will reduce the wide variability, if not outright confusion, in interpretation and enforcement.
6. Not all development is “good,” and not all regulations are “bad” for our economy and the quality of life in our communities. Municipalities, school districts, utilities, businesses, and individuals routinely become burdened with a wide range of now hidden or under-valued consequences and costs of conventional development. Avoiding these unfair and unreasonable burdens should become part of the regulatory and planning processes so as to protect innocent parties.
7. Small development sites, or those developed in small increments, often are exempt from regulations. Nonetheless, these sites collectively create substantial erosion, sedimentation, and flooding consequences. Sites of under one acre should be required to have adequate, although small-scale, E&S control and stormwater management measures in place throughout construction and post-construction.
8. Regulations are useless unless accompanied by full inspection and enforcement capabilities, and resources, fully integrated into a single, fully funded system.
9. Resources should be available to assist willing permittees with application and compliance to insure the best outcomes. However, fines and penalties should be commensurate with the full impacts of violations. They should be high enough to encourage responsible attitudes and

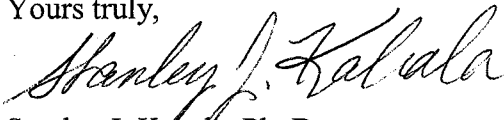
behaviors. Small-scale consequences become acceptable risks and costs of doing business, and they only encourage violations – bringing associated damage and cost.

10. Licensed or certified professionals should remain integral to the planning, design, and permitting processes. They should be held accountable to use the most accurate E&S control and stormwater management methods best suited to each development site. These professionals should also become integral to the construction and post-construction processes to insure development proceeds in accordance with approved permits.

Thank you very much for your consideration of CERE's recommendations. Our work has taught us that good development practices and good regulations, far from stifling economic development and stability (as is commonly perceived), in fact are creating a sound framework for economic revitalization in many places across the country. We believe the EQB can be instrumental in creating the same type of framework here in Pennsylvania.

Any time the EQB members would like more information about our work, please contact me by phone at 412/396-4233 or by e-mail at kabala@duq.edu.

Yours truly,



Stanley J. Kabala, Ph. D.
Assistant Director

